

## C L A I M S

1. A moisture detection device characterized  
2 by comprising:  
3 a mirror whose mirror surface is exposed to a  
4 gas to be measured;  
5 minute projections formed on the mirror  
6 surface of said mirror;  
7 cooling means for cooling said mirror;  
8 light-emitting means for applying light to the  
9 mirror surface;  
10 light-receiving means for receiving reflected  
11 light of light applied from said light-emitting means to  
12 the mirror surface; and  
13 means for detecting moisture which is produced  
14 on the mirror surface of said mirror which is cooled by  
15 said cooling means on the basis of the reflected light  
16 received by said light-receiving means.

2. A moisture detection device according to  
2 claim 1, characterized in that the projection comprises  
3 a projection with a pointed tip.

3. A moisture detection device according to  
2 claim 1, characterized in that the projection comprises  
3 a columnar projection.

4. A moisture detection device according to  
2 claim 1, characterized in that the projection comprises  
3 a semispherical projection.

5. A moisture detection device according to

2 claim 1, characterized in that the projection is formed  
3 by using a photoresist and etching.

6. A moisture detection device according to  
2 claim 1, characterized in that the projection is  
3 structured such that glass powder is bonded to the  
4 mirror surface.

7. A moisture detection device according to  
2 claim 1, characterized in that the projection is  
3 structured such that diamond powder is bonded to the  
4 mirror surface.